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SHUMAKER & SIEFFERT, P.A
1625 RADIO DRIVE, SUITE 100
WOODBURY, MN 55125

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HRISHIKESH GADAGKAR,
JAMES ZIMMERMAN, JAMES M. OLSEN,
ROBYN L. JAGLER, TIMOTHY R. ABRAHAM, and
JEFFREY R. DIXON

Appeal 2015-002421
Application 12/626,342
Technology Center 3700

Before LYNNE H. BROWNE, LISA M. GUIJT, and ERIC C. JESCHKE,
Administrative Patent Judges.

BROWNE, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Hrishikesh Gadagkar et al. (Appellants) appeal under 35 U.S.C. § 134 from the rejection of claims 1–5, 7–14, 16–22, 24–27, 29, 31, 32, 35, 37–39, 41, 42, and 46–57 under 35 U.S.C. § 103(a) as unpatentable over Zarembo (US 2005/0258242 A1, pub. Nov. 24, 2005) and Cooke (US 7,561,915 B1, iss. July 14, 2009). We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE and enter a NEW GROUND of REJECTION pursuant to our authority under 37 C.F.R. 41.50(b).

CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A system comprising a processor configured to:
automatically obtain magnetic resonance imaging (MRI) compatibility information relating to compatibility of an active implantable medical device (AIMD) implantable in a patient with an MRI modality from at least two information sources, wherein the at least two information sources comprise at least one of a first information source associated with a patient programmer or a second information source associated with the AIMD, wherein the patient programmer is configured to communicate with the AIMD, and wherein the MRI compatibility information comprises at least one of an implant date of the AIMD, an implant revision date of the AIMD, a serial number of the AIMD, a model number of the AIMD, a registration number of the AIMD, a manufacturer of the AIMD, an implant location of the AIMD, a serial number of a lead coupled to the AIMD, a model number of the lead coupled to the AIMD, a registration number of the lead coupled to the AIMD, an implant location of the lead coupled to the AIMD, a manufacturer of the lead, a presence of an orphaned lead implanted in the body and not coupled to the AIMD, or a presence of another implantable medical device implanted in the patient, and
automatically determine compatibility of the AIMD with the MRI modality based on the MRI compatibility information.

DISCUSSION

The Examiner finds that Zaremba discloses a system comprising a processor. *See* Final Act. 3. The Examiner further finds that Zaremba's processor is configured to obtain magnetic resonance imaging compatibility information of an active implantable medical device from at least two information sources (RF communication device 210 and RFID unit 320A).

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Ans. 7. The Examiner finds that Zarembo's communication device 210 is associated with a patient programmer (*id.* (citing Zarembo ¶ 21)) and that Zarembo's RFID unit 320A is associated with an AIMD and includes information "such as a serial number or model number." *Id.* at 7–8 (citing Zarembo ¶ 23). The Examiner further determines that "[t]he information acquired from these two sources may be used in combination with the system of Cooke to determine MRI compatibility information." *Id.* at 8.

The Examiner determines that Zarembo does not disclose "automatically determining compatibility of the AIMD with the MRI modality based on the MRI compatibility information" as required by claim 1. *See* Final Act. 4: *see also* Ans. 6 (explaining that determining whether or not the AIMD should enter a safe mode is synonymous with determining MRI compatibility). The Examiner finds that Cooke discloses a system "operable to automatically detect the presence of an IMO and determine if the IMD is compatible with the MRI." Ans. 5 (citing Cooke 2:13–18). Based on these findings the Examiner determines that it would have been obvious

to modify the system as taught by Zarembo, with the ability to use the system with an AIMD that could enter safe mode, since such a modification would provide the predictable results of being able to detect an implantable device that would interfere with an MRI and be able to adjust it accordingly in order to ensure accurate results from the scan.

Final Act. 4–5. In other words, the Examiner determines that it would have been obvious to modify Zarembo to use a processor that "automatically determine[s] compatibility of the AIMD with the MRI modality based on the MRI compatibility information" as required by claim 1, because

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automatically entering a safe mode necessarily requires automatically determining MRI compatibility information.

Appellants contend that:

the Examiner failed to establish that any device in Zaremba, alone or in view of Cooke, discloses or suggests a processor configured to automatically obtain magnetic resonance imaging (MRI) compatibility information relating to compatibility of an active implantable medical device (AIMD) implantable in a patient with an MRI modality from at least two information sources.

Reply Br. 7; *see also* Appeal Br. 14. In support of this contention, Appellants argue that

The portions of Zaremba cited in the Examiner's Answer do not support an assertion that any device retrieves MRI compatibility from two sources. Instead, the cited portion of Zaremba states, "The RF communication device 210 is used to interrogate and/or write to the RFID units 220." Although the cited portion of Zaremba describes that the RF communication device also communicates with a programmer, the cited portion of Zaremba does not describe that the RF communication device obtains (MRI) compatibility information from both the programmer and the RFID units.

Id. at 7–8 (footnote omitted). Appellants are correct. Although Zaremba discloses two information sources, Zaremba does not describe "obtain[ing] magnetic resonance imaging (MRI) compatibility information . . . from at least two information sources" as required by claim 1.

For this reason, we do not sustain the Examiner's decision rejecting claim 1, and claims 2–5 and 7–10, which depend therefrom. Independent claims 11, 19, 27, 32, 38, and 42 have similar limitations. Accordingly, we do not sustain the Examiner's decision rejecting claims 11, 19, 27, 32, 38, and 42, and their dependent claims, 12–14, 16–18, 20–22, 24–26, 29, 31, 35, 37, 39, 41, and 46–57 for the same reason.

New Ground of Rejection

Claims 1–5, 7–14, 16–22, 24–27, 29, 31, 32, 35, 37–39, 41, 42, and 46–57 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

The Supreme Court has set forth “a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 132 S Ct. 1289, 1294 (2012)). According to the Supreme Court’s framework, we must first determine whether the claims at issue are directed to one of those concepts (i.e., laws of nature, natural phenomena, and abstract ideas). *Id.* If so, we must secondly “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* The Supreme Court characterizes the second step of the analysis as “a search for an ‘inventive concept’ — i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.*

Independent claims 1, 11, 19, 27, 32, 38, and 42 (hereinafter “the independent claims”) are directed to a system comprising a processor, a method, or a computer-readable medium, all of which perform essentially the same steps of automatically gathering data from two information sources and automatically using that data to make a determination. In other words, the independent claims are directed to a set of rules performed by a computer (i.e. software).

Our reviewing court instructs us that “[s]oftware can make non-abstract improvements to computer technology just as hardware improvements can, and sometimes the improvements can be accomplished through either route.” *Enfish, LLC v. Microsoft Corp.*, No. 2015-1244, 2016 WL 2756255, at 4 (Fed. Cir. May 12, 2016). We are further instructed that we must determine if “the claims are directed to an improvement to computer functionality versus being directed to an abstract idea, even at the first step of the Alice analysis.” *Id.* Here, the limitations at issue are not directed to an improvement of a computer’s functionality. Accordingly, the independent claims are directed to an abstract idea.

Having determined that the independent claims are directed to an abstract idea, we must determine whether the additional elements of the independent claims transform them into patent-eligible subject matter. Although the independent claims set forth specific data to be collected and indicate where that data is to be collected from, they do not specify how the collection is accomplished or how the data comparison is to be made. As such, the independent claims only require “mathematical algorithms to manipulate existing information to generate additional information.” *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014). Thus, the limitations of these claims do not transform the abstract ideas embodied in the claims. Rather, they simply implement them.

The independent claims, when considered “both individually and ‘as an ordered combination,’” amount to nothing more than an attempt to patent the abstract ideas embodied in the steps of these claims. *See Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298). Accordingly, the limitations of the independent claims fail to transform the nature of these claims into

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patent-eligible subject matter. *See id.* (citing *Mayo*, 132 S. Ct. at 1297, 1298).

DECISION

The Examiner's rejection of claims 1–5, 7–14, 16–22, 24–27, 29, 31, 32, 35, 37–39, 41, 42, and 46–57 is REVERSED.

We enter a NEW GROUND OF REJECTION of claims 1–5, 7–14, 16–22, 24–27, 29, 31, 32, 35, 37–39, 41, 42, and 46–57 under 35 U.S.C. § 101.

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.” Section 41.50(b) also provides:

When the Board enters such a non-final decision, the Appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or new Evidence not previously of Record is made which, in the opinion of the examiner, overcomes the new ground of rejection designated in the decision. Should the examiner reject the claims, appellant may again appeal to the Board pursuant to this subpart.

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

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Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

REVERSED; 37 C.F.R. § 41.50(b)